



PATENT

Attorney Docket No. 68702

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): H. Nguyen

Appln No.: 09/557,690

Filed: April 25, 2000

For: Method and Apparatus for
Receiving a Plurality of Different
Codes at a Plurality of Different
Frequencies

Group Art
Unit: 2683

Examiner: Sharad K. Rampuria

CERTIFICATE OF MAILING

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5/29/03

Date

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TRANSMITTAL OF APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:


Transmitted herewith is an Appeal Brief in the above-identified application..

- ☒ The fee for this Notice of Appeal is \$320.00 (37 CFR § 1.17(b).
- ☐ Applicant(s) assert entitlement to Small Entity Status (37 CFR § 1.27), reducing the Appeal Fee by half to \$ 160.00.
- ☒ Charge \$320.00 to Deposit Account No. 06-1135.
- ☐ A check in the amount of the fee is enclosed.
- ☐ Not required (fee paid in prior appeal in this application).
- ☐ A petition for extension of time under 37 CFR § 1.136(a) is enclosed.
- ☒ The Commissioner is hereby authorized to charge any additional fees which may be required in connection with this appeal (specifically including the fee for filing a brief in support of this appeal if such brief is filed unaccompanied by full payment therefor, and the fee for filing a request for an oral hearing if such request is made unaccompanied by full payment therefor), or credit any overpayment to Deposit Account No. 06-1135. Should no proper payment be

enclosed herewith, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1135. This Notice is filed in duplicate.

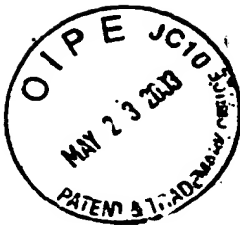
May 20, 2003

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6/3/03

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APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §1.192, the applicants hereby respectfully submit the following Brief in support of their appeal. Pursuant to 37 C.F.R. §1.192(a) this brief is being filed in triplicate.

(1) Real Party in Interest

The real party in interest is The Chamberlain Group, Inc., a Connecticut corporation having its principal place of business in Illinois.

(2) Related Appeals and Interferences

There are no related appeals or interferences known to appellant, the appellant's legal representative, or assignee, that will directly affect, or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

Claims 1-13 are pending and presently stand twice rejected and constitute the subject matter of this appeal.

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(4) Status of Amendments

There are no pending un-entered amendments.

(5) Summary of Invention

This relates generally to an RF receiver capable of receiving a plurality of different codes at a plurality of different carrier frequencies. Such an approach is useful with, for example, a receiver that is used with a garage door opener to permit that garage door opener to work compatibly with a variety of transmitters that use different transmission frequencies and transmit different enabling codes as compared to one another.

With reference to FIG. 2, a selector circuit switch 56 serves to selectively couple an RF front end 54 to any of a plurality of tuning circuits. The latter determine the resonant frequency of the receiver. The selection itself can be realized, for example, through use of signal diodes to add or remove discrete components to and from a bandpass filter.¹

Various input units facilitate configuration of the receiver. For example, configuration inputs 72 determine what type of code will actuate the receiver to thereby cause the receiver to take a particular action (such as to cause a garage door to move in a desired direction). This accommodates different codes as used by different manufacturers of receivers/transmitters (i.e. a first manufacturer may use a first code while a second manufacturer may use a second, different code). As another example, bit pattern inputs 70 determine what bit pattern the incoming signal must have in order to operate the receiver.²

So configured, the receiver is "capable of receiving a plurality of different codes at a plurality of different frequencies."³ In addition, the receiver is flexibly configured to compatibly deal with a variety of bit patterns by which the different codes may be presented, including bit patterns that are characterized by differing packet lengths. To illustrate this point, the specification provides an example where the receiver can selectively and compatibly receive any of, "[manufacturer] A's code [which] is an eight bit code transmitted at 310 MHz, [manufacturer] B's code [which] is a ten bit code

¹ Page 5, line 32 - page 6, line 10.

² Page 6, lines 17 - 34.

³ Page 7, lines 22 - 24.

transmitted at 300 MHz, and [manufacturer] C's code [which] is a ten bit code transmitted at 310 MHz."⁴

(6) Issues

Claim 1 is rejected under 35 U.S.C. 103(a) given Hwang (U.S. Patent No. 5,907,795) in view of Sobel et al. (U.S. Patent No. 6,486,795). Claim 2 is rejected under 35 U.S.C. 103(a) given Hwang in view of Sobel and further in view of Holmes (U.S. Patent No. 5,262,769). Claims 3 and 4 were rejected under 35 U.S.C. 103(a) given Hwang in view of Sobel and Holmes and further in view of Schulze (U.S. Patent No. 4,878,052). Claim 5 is rejected under 35 U.S.C. 103(a) given Hwang and Freen (U.S. Patent No. 3,746,999). Claims 6, 7, and 9 is rejected under 35 U.S.C. 103(a) given Heitschel et al. (U.S. Patent No. Re. 36,703) in view of Sobel. Claim 8 is rejected under 35 U.S.C. 103(a) given Heitschel in view of Sobel and Schulze. Claim 10 is rejected under 35 U.S.C. 103(a) given Sobel in view of Holmes. Claims 11 and 12 are rejected under 35 U.S.C. 102(e) given Sobel. And claim 13 is rejected under 35 U.S.C. 103(a) given Sobel in view of Schulze.

(7) Grouping of Claims

The Applicant's points of contention are directed at the mis-characterization of two of the prior art references, and therefore two corresponding groupings (one grouping per reference) is suggested as a most convenient and expedient way to consider the issues, notwithstanding some overlap between the claims that are impacted by this approach. Therefore, Group 1 includes claims 1 through 5 and Group 2 includes claims 1 through 13.

(8) Argument

Group 1 - Claims rejected using Hwang as a primary reference

Claims 1 through 5 have been rejected under 35 U.S.C. 103(a) using Hwang as a primary reference in combination with other references. The Examiner has cast Hwang as disclosing a receiver capable of receiving a plurality of different codes at a plurality of different frequencies. The Examiner is categorically incorrect as to this characterization - Hwang's disclosure has nothing to say with respect to "a plurality of different frequencies." Hwang discloses a battery saving radio paging signal transmitting and receiving system. According to Hwang, a pager may be either a local

⁴ Page 13, lines 12 - 15.

area service subscriber or a wide area service subscriber. Both types of subscriber **share a common reception carrier.**

Claims 1 through 5, however, all specify a receiver that is capable of receiving a plurality of codes at a plurality of different frequencies. Since the primary reference relied upon by the Examiner lacks an element included in these claims, the rejection can not stand.

Group 2 - Claims rejected using Sobel as a sole, primary, or secondary reference
The Examiner relies upon Sobel for a number of teachings.

For example, Claims 1 through 9 have been rejected wherein the Examiner applies Sobel as being part of an "analogous art" that teaches that different bit patterns can differ from one another with respect to packet length. The Examiner's reliance upon Sobel, however, is considerably misplaced. The claims are directed to "receiving," and the context of the recitation in question is the reception of different bit patterns that can differ from one another with respect to packet length. Sobel, however, deals **only with transmitting**. Sobel lacks any teachings with respect to reception. The Examiner cannot properly, merely by invoking the words "analogous art," pick and choose from amongst the many integrated attributes of a transmission-only reference and import a selected nuance of interest, sans context, into a reception embodiment. On its face, transmission and reception are highly different from one another as surely as throwing a ball is quite different from catching a ball. The requisite skills and mechanical processes of successfully throwing a ball are different from those required to successfully catch a ball and the mere fact that both involve a "ball" does not make one an analogous art to the other. So it is with transmission and reception. The rejection of claims 1 through 9 with partial reliance upon Sobel is therefore highly inappropriate.

Claims 10 through 13 present an even more egregious application of the Sobel reference, as here the Examiner relies upon Sobel as a primary reference. Furthermore, with these claims, the Examiner's misconstruing of the Sobel reference rings ever more clear. Consider, for example, these statements wherein the Sobel reference is incorrectly characterized:

"Regarding claim 10, Sobel disclosed a method of digitally controlling the frequency of a **receiver** comprising the steps of"

"Regarding claim 11, Sobel disclosed a method of **receiving** a receiver actuating signal comprising the steps of"

Again however, notwithstanding the Examiner's attempt to characterize the Sobel reference as dealing with receivers and reception of radio frequency energy, the simple fact remains that Sobel describes **ONLY** a transmitter. The Examiner's reliance upon and application of Sobel's teachings to the present claims is completely inappropriate and misplaced. Though this inappropriate application of Sobel occurs

with respect to all of the claims, the most egregious example occurs with respect to claims 11 and 12, wherein the Examiner has applied Sobel as the only reference and wherein the rejection is based upon a lack of novelty under 35 U.S.C. 102(e). Clearly the difference between "transmitter" and "receiver" should suffice to establish, at a minimum, novelty with respect to these claims.

The Applicant therefore respectfully submits that the claims of record are allowable over the prior art references of record, once those references are properly characterized and understood. Allowance of claims 1 through 13 is hereby respectfully solicited.

(9) Appendix

1. A receiver capable of receiving a plurality of different codes at a plurality of different frequencies, comprising:
 - an input device for selection among a plurality of different codes and a plurality of different bit patterns wherein at least some of the plurality of different bit patterns differ from one another with respect to packet length;
 - an antenna for receiving a receiver actuation signal;
 - digital frequency control circuitry;
 - a controller for comparing said received receiver actuation signal to said code and bit pattern selections; and
 - output circuitry for responding to the receipt of a receiver actuation signal that matches said code and bit pattern selections.
2. The receiver of claim 1 wherein said digital frequency control circuitry comprises a signal diode capable of adding and removing discrete components from a bandpass filter.
3. The receiver of claim 2 wherein said input device for selecting among a plurality of different codes is a multi-position switch.
4. The receiver of claim 2 wherein said input device for selecting among a plurality of different bit patterns is a DIP switch.
5. A super-regenerative receiver capable of receiving a plurality of different codes at a plurality of different frequencies, comprising:
 - an input device for selection among a plurality of different codes and a plurality of different bit patterns wherein at least some of the plurality of different bit patterns differ from one another with respect to packet length;
 - an antenna for receiving a receiver actuation signal;

digital frequency control circuitry;
a controller for comparing said received receiver actuation signal to said code and bit pattern selections; and
output circuitry for responding to the receipt of a receiver actuation signal that matches said code and bit pattern selections.

6. A radio frequency receiver for receiving a plurality of actuation signals from a movable barrier operator transmitter, each receiver being capable of receiving a plurality of coded signals comprising:

a plurality of different codes; and
different bit patterns wherein at least some of the bit patterns differ from one another with respect to packet length;
at a plurality of different frequencies, comprising:
first and second user-selectable input devices for selecting a specified code and a specified bit pattern for receiving said actuation signals;
a controller coupled to said input devices for processing said code and bit pattern selections and outputting data responsive to said input; and
receiver circuitry responsive to said controller output data for receiving particular actuation signals at one frequency and receiving particular other actuation signals at another frequency.

7. The radio frequency receiver of claim 6, wherein said first user-selectable input device comprises a multi-position switch which determines a particular code to be received as said actuation signal based upon the position of said multi-positioned switch.

8. The radio frequency receiver of claim 7, wherein said second user-selectable input device comprises a dual in-line packaged switch having a plurality of inner switches which determine a particular bit sequence to be received as said actuation signal based upon the position of said plurality of inner switches.

9. The radio frequency receiver of claim 8, wherein said controller processes the code and bit sequence selections from said input devices and outputs data according to said input to said receiver circuitry causing said receiver circuitry to receive particular data at one frequency and other data at another frequency.

10. A method of digitally controlling the frequency of a receiver comprising the steps of:
providing a bandpass filter;

providing a signal diode connecting additional discrete components to said bandpass filter;

providing a controller for controlling the operation of said signal diode to alter the discrete component makeup of the bandpass filter to adjust frequency; and
outputting signals to said diode to alter the bandpass filter frequency.

11. A method of receiving a receiver actuating signal comprising the steps of:
providing a receiver having multiple input devices coupled to a microprocessor and receiver circuitry;
adjusting said receiver circuitry to receive a particular code at a particular frequency based on the position of said multiple input devices and output from said microprocessor; and
receiving said receiver actuating signal.

12. The method of claim 11 wherein one of said multiple input devices is a multi-positioned switch which determines the code to be received as said receiver actuating signal based upon the position of said multi-positioned switch.

13. The method of claim 12 wherein another of said multiple input devices is a dual in-line packaged switch having multiple inner switches which determines a bit pattern to be received as said receiver actuating signal based upon the position of said inner switches.

Respectfully submitted,

May 20, 2003
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